

# ABSTRACT OF THE DISCLOSURE

When a specified air-fuel ratio F/B control condition is established during supply of a secondary air provided, an air-fuel ratio F/B control is executed, and at this time, an  
5 initial value of a target air-fuel ratio is set to a before-catalyst air-fuel ratio detected by an A/F (air-fuel ratio) sensor. The target air-fuel ratio subsequent to this is gradually changed from the initial value to a specified air-fuel ratio. By this, the initial value of the target  
10 air-fuel ratio can be suitably set at a start time of execution of the air-fuel ratio F/B control during the supply of the secondary air. The target air-fuel ratio subsequent to this is gradually changed to a stoichiometric air-fuel ratio, so that a change in engine rotation speed is suppressed and the  
15 drivability can be improved.